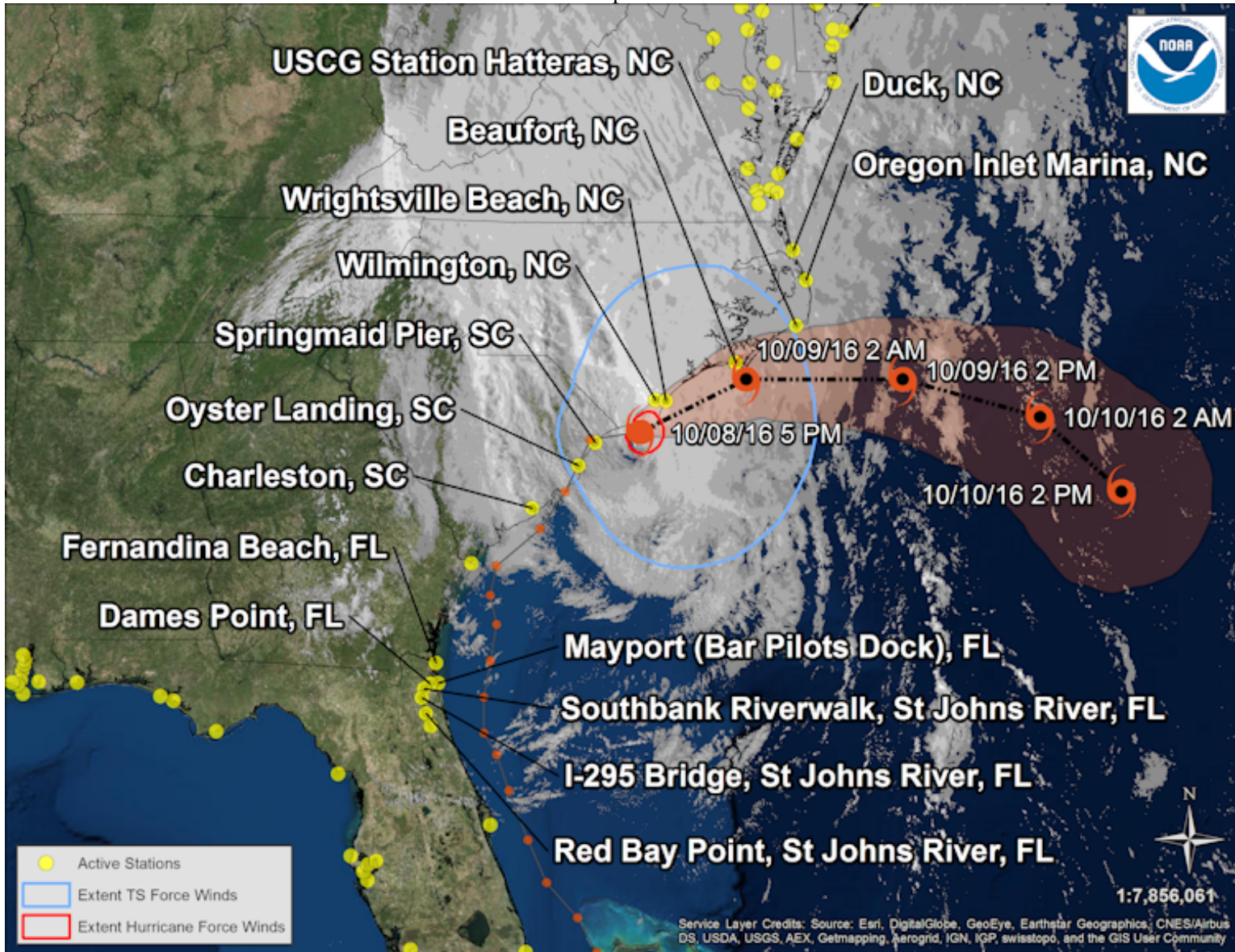




# Hurricane MATTHEW QuickLook Posted: 18:00 EDT 10/08/2016

NOAA and NOAA Partnership Stations Relative to the Storm



## Storm Analysis

As of 10/8/2016 18:00 EDT, water levels north of Wilmington North Carolina are plotting above normal tidal levels ranging from 0 to 4 ft above tidal predictions. Water levels from Springmaid pier down to Florida are plotting closer to normal tidal levels ranging from 0.5 to 2 ft above tidal predictions.

Winds are increasing in North Carolina ranging from 20-25 knots with gusts slightly higher. Barometric pressure is decreasing along the coast of North Carolina. Stations in South Carolina and on the eastern coast of Florida see decreasing winds ranging from 7 to 11 knots. Barometric pressure along this region is increasing back to normal.

The NOS stations at Red Bay Point within St. Johns River and Fort Pulaski, GA have been removed from this product as the stations were likely damaged or destroyed during the storm.

Water Level and Meteorological plots available below are updated automatically. A line denoting Mean Higher High Water (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional data, please see the Center for Operational Oceanographic Products & Services website. For more information or archived products and reports, please see the Storm QuickLook Homepage.

Analyst: KLO

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NATIONAL HURRICANE CENTER PUBLIC ADVISORY:BULLETIN

BULLETIN  
HURRICANE MATTHEW ADVISORY NUMBER 43  
NWS NATIONAL HURRICANE CENTER MIAMI FL AL142016  
500 PM EDT SAT OCT 08 2016

...TORRENTIAL RAINS SPREADING INLAND ACROSS THE CAROLINAS WHILE  
MATTHEW HUGS THE COAST...

SUMMARY OF 500 PM EDT...2100 UTC...INFORMATION  
-----

LOCATION...33.8N 78.2W  
ABOUT 15 MI...20 KM WSW OF CAPE FEAR NORTH CAROLINA  
ABOUT 105 MI...170 KM WSW OF CAPE LOOKOUT NORTH CAROLINA  
MAXIMUM SUSTAINED WINDS...75 MPH...120 KM/H  
PRESENT MOVEMENT...ENE OR 70 DEGREES AT 13 MPH...20 KM/H  
MINIMUM CENTRAL PRESSURE...977 MB...28.85 INCHES

WATCHES AND WARNINGS  
-----

CHANGES WITH THIS ADVISORY:

The Hurricane Warning from South Santee River southward has been discontinued.

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

\* North of South of Santee River to Surf City

A Hurricane Watch is in effect for...

\* North of Surf City to Cape Lookout

A Tropical Storm Warning is in effect for...

\* North of Surf City to Duck

\* Pamlico and Albemarle Sounds

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

## DISCUSSION AND 48-HOUR OUTLOOK

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At 500 PM EDT, the center of Hurricane Matthew was located near 33.8N 78.2W. Matthew is moving toward the east-northeast near 13 mph, and this motion is expected to continue tonight and early Sunday. On the forecast track, the center of Matthew will be near the coast of southern North Carolina by this evening.

Maximum sustained winds remain near 75 mph with higher gusts. Although weakening is forecast during the next 48 hours, Matthew is expected to remain near hurricane strength while the center is near the coasts of North Carolina.

Hurricane-force winds extend outward up to 25 miles mainly over water to the east of the center. Tropical-storm-force winds extend outward up to 185 miles. Multiple private weather stations along the coast of South Carolina near Myrtle Beach have recently reported hurricane-force wind gusts.

The minimum central pressure estimated from Air Force aircraft data is 977 mb. CORMP buoy 41024 near the center also reported a minimum pressure of 977.8 mb.

## HAZARDS AFFECTING LAND

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WIND: Hurricane and tropical storm conditions are expected to continue over the warning area this afternoon, and spread northward elsewhere within the warning area through tonight.

Hurricane conditions are possible within the Hurricane Watch and Tropical Storm Warning area in North Carolina by tonight or Sunday morning, with tropical storm conditions expected later tonight.

STORM SURGE: The combination of a dangerous storm surge, the tide, and large and destructive waves will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water could reach the following heights above ground if the peak surge occurs at the time of high tide...

Murrells Inlet, South Carolina, to Duck, North Carolina, including portions of the Pamlico and Albemarle Sounds...3 to 5 ft

Along the Georgia and South Carolina coasts southwest of Matthew's center, inundation caused by Matthew's storm surge will slowly recede today.

The deepest water will occur along the immediate coast in areas of onshore winds. Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. Large waves generated by Matthew will cause water rises to occur well in advance of and well away from the track of the center. For information specific to your area, please see products issued by your local National Weather Service forecast office.

There is a danger of life-threatening inundation during the next 36 hours along the coast from Murrells Inlet, South Carolina to Salvo, North Carolina including portions of the Pamlico Sound. There is the possibility of life-threatening inundation during the next 48 hours from Salvo to Duck, North Carolina including portions of the Albemarle Sound. For a depiction of areas at risk, please see the Prototype National Weather Service Storm Surge Watch/Warning Graphic. For information specific to your area, please see products issued by your local National Weather Service forecast office.

The Prototype Storm Surge Watch/Warning Graphic is a depiction of areas that would qualify for inclusion under a storm surge watch or warning currently under development by the National Weather Service and planned for operational use in 2017. The Prototype Graphic is available at [hurricanes.gov](http://hurricanes.gov).

RAINFALL: Matthew is expected to produce total rain accumulations of 8 to 12 inches from northeast South Carolina into northeast North Carolina and southeast Virginia, with possible isolated totals of 20 inches possible. This rainfall may result in life-threatening flooding and flash flooding.

TORNADOES: A couple of tornadoes are possible this afternoon along the coast of North Carolina.

SURF: Swells generated by Matthew will continue to affect much of the coast of the southeastern United States through early next week. These swells will likely cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

#### NEXT ADVISORY

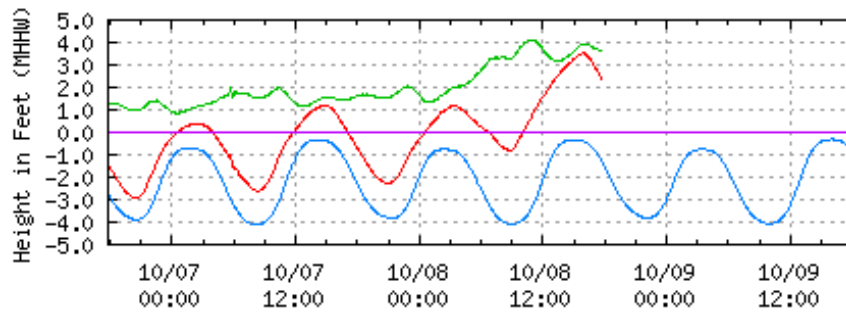
-----  
Next intermediate advisory at 800 PM EDT.  
Next complete advisory at 1100 PM EDT.

\$\$  
Forecaster Avila

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Wilmington - Water Level](#), [Wilmington - Barometric](#), [Wrightsville Beach - Water Level](#), [Wrightsville Beach - Winds](#), [Beaufort - Water Level](#), [Beaufort - Winds](#), [Oregon Inlet Marina - Water Level](#), [Oregon Inlet Marina - Winds](#), [USCG Station Hatteras - Water Level](#), [USCG Station Hatteras - Winds](#), [USCG Station Hatteras - Barometric](#), [Duck - Water Level](#), [Duck - Winds](#), [Duck - Barometric](#), [Springmaid Pier - Water Level](#), [Springmaid Pier - Barometric](#), [Oyster Landing \(N Inlet Estuary\) - Water Level](#), [Charleston - Water Level](#), [Charleston - Winds](#), [Charleston - Barometric](#), [Fernandina Beach - Water Level](#), [Fernandina Beach - Winds](#), [Fernandina Beach - Barometric](#), [Mayport \(Bar Pilots Dock\) - Water Level](#), [Mayport \(Bar Pilots Dock\) - Winds](#), [Mayport \(Bar Pilots Dock\) - Barometric](#), [Dames Point - Water Level](#), [Southbank Riverwalk, St Johns River - Water Level](#), [I-295 Bridge, St Johns River - Water Level](#), [I-295 Bridge, St Johns River - Winds](#), [I-295 Bridge, St Johns River - Barometric](#), [Racy Point, St Johns River - Water Level](#)

NOAA/NOS/CO-OPS 8658120 Wilmington, NC  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW

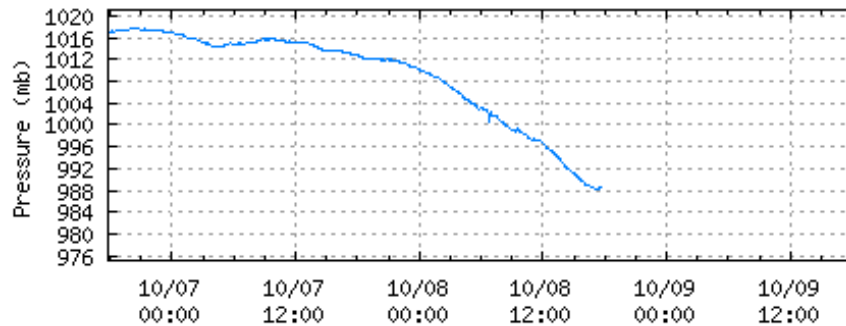
Observed: 2.35 ft. Predicted: -1.29 ft. Residual: 3.64 ft.

Historical Maximum Water Level: Oct 15 1954, 3.47 ft.

Next High Tide: 10/09/2016 03:26 (EDT), -0.77 ft.

NOAA/NOS/CO-OPS 8658120 Wilmington, NC

Barometric Pressure

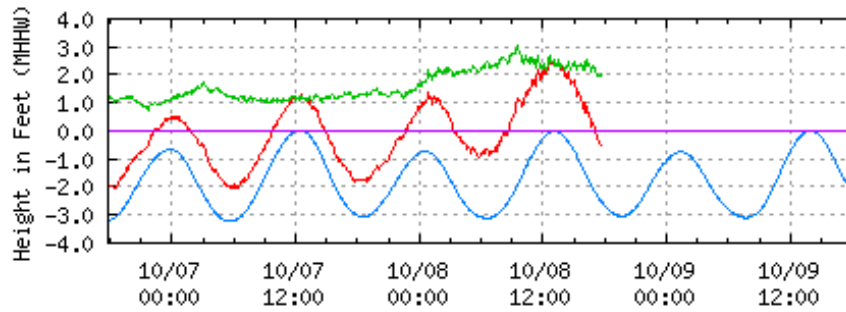


barometric pressure —

Last Observed Sample: 10/08/2016 17:42 (EDT)

Barometric Pressure: 988.5 mb

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide ——— (Obs-Pred) ———  
Observed WL ——— MHHW ———

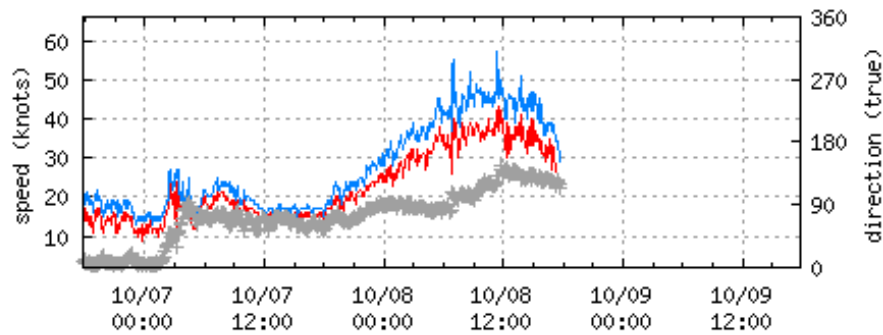
Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW

Observed: -0.51 ft. Predicted: -2.53 ft. Residual: 2.02 ft.

Historical Maximum Water Level: Sep 25 2008, 2.81 ft.

Next High Tide: 10/09/2016 01:22 (EDT), -0.75 ft.

NOAA/NOS/CO-OPS 8658163 Wrightsville Beach, NC  
Wind Speed / Gusts / Direction

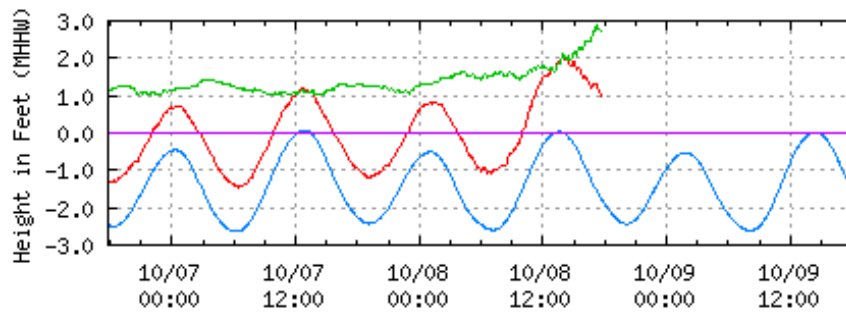


speed ——— gusts ——— direction +

Last Observed Sample: 10/08/2016 17:42 (EDT)

Wind Speed: 23 knots Gusts: 31 knots Direction: 119° T

NOAA/NOS/CO-OPS 8656483 Beaufort, NC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

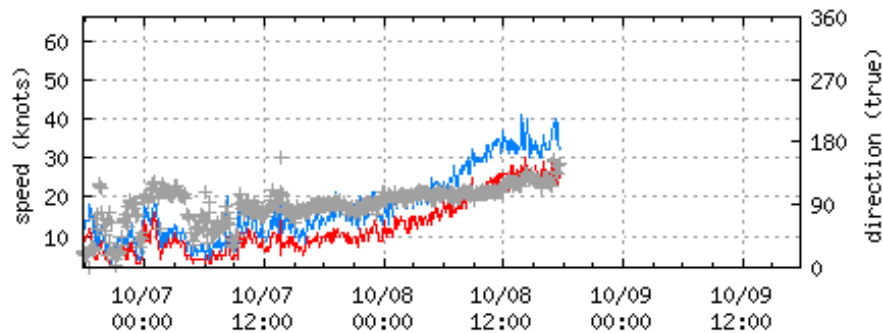
Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW

Observed: 0.89 ft. Predicted: -1.78 ft. Residual: 2.67 ft.

Historical Maximum Water Level: Sep 14 2005, 3.01 ft.

Next High Tide: 10/09/2016 01:51 (EDT), -0.53 ft.

NOAA/NOS/CO-OPS 8656483 Beaufort, NC  
Wind Speed / Gusts / Direction



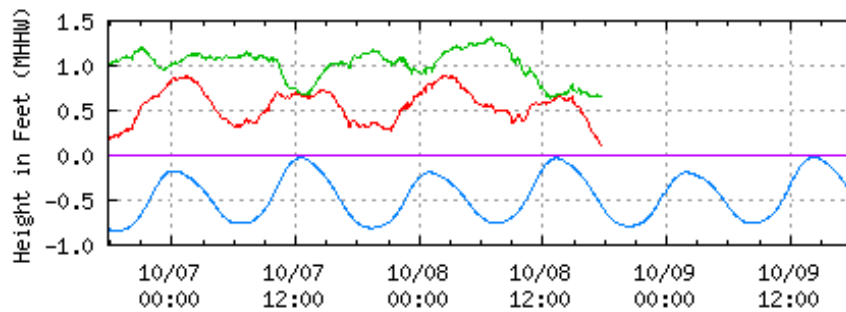
speed — gusts — direction +

Last Observed Sample: 10/08/2016 17:42 (EDT)

Wind Speed: 21 knots Gusts: 38 knots Direction: 149° T



NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide ——— (Obs-Pred) ———  
Observed WL ——— MHHW ———

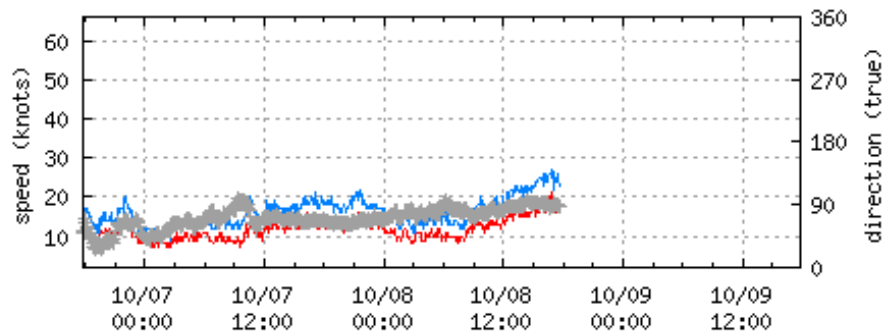
Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW

Observed: 0.08 ft. Predicted: -0.57 ft. Residual: 0.65 ft.

Historical Maximum Water Level: Aug 28 2011, 6.32 ft.

Next High Tide: 10/09/2016 01:56 (EDT), -0.19 ft.

NOAA/NOS/CO-OPS 8652587 Oregon Inlet Marina, NC  
Wind Speed / Gusts / Direction



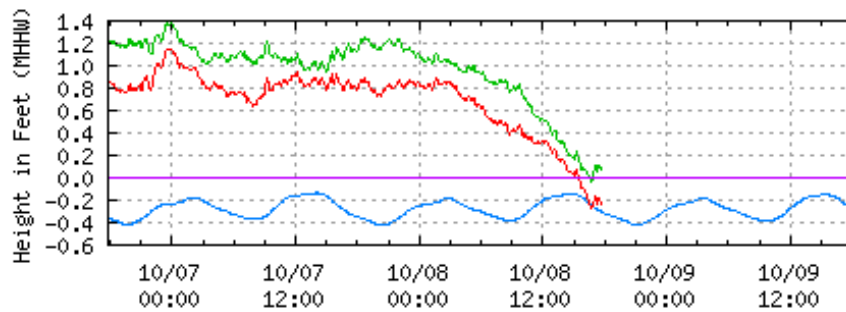
speed ——— gusts ——— direction +

Last Observed Sample: 10/08/2016 17:42 (EDT)

Wind Speed: 18 knots Gusts: 25 knots Direction: 89° T



NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide ——— (Obs-Pred) ———  
Observed WL ——— MHHW ———

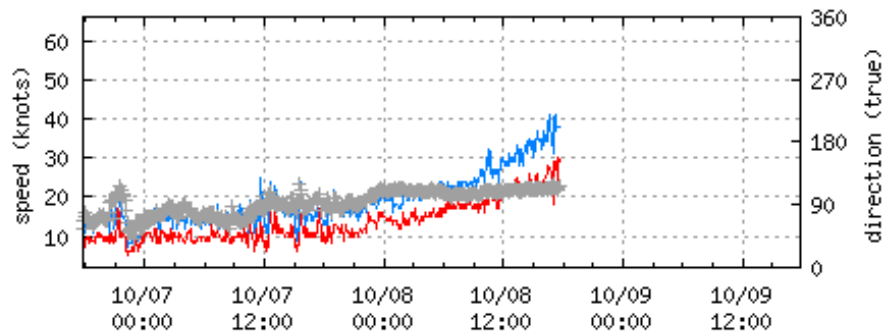
Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW

Observed: -0.25 ft. Predicted: -0.31 ft. Residual: 0.06 ft.

Historical Maximum Water Level: Oct 29 2012, 4.02 ft.

Next High Tide: 10/09/2016 03:32 (EDT), -0.19 ft.

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC  
Wind Speed / Gusts / Direction

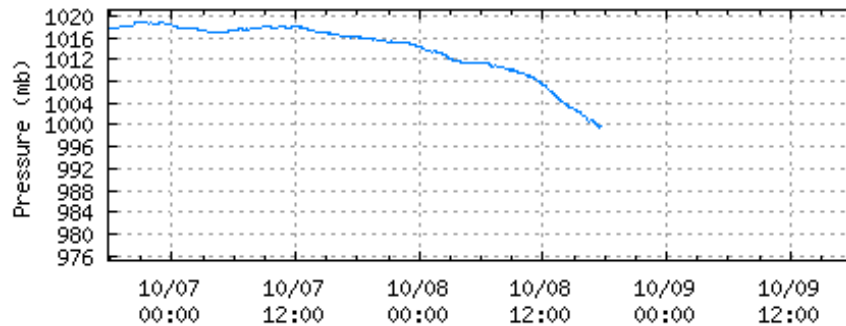


speed ——— gusts ——— direction +

Last Observed Sample: 10/08/2016 17:42 (EDT)

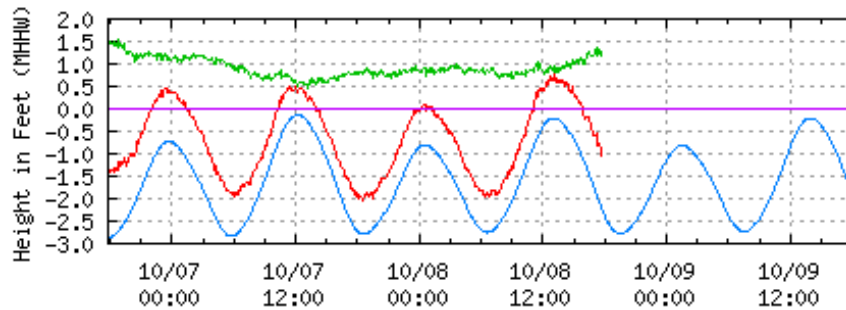
Wind Speed: 26 knots Gusts: 34 knots Direction: 112° T

NOAA/NOS/CO-OPS 8654467 USCG Station Hatteras, NC  
Barometric Pressure



barometric pressure —  
Last Observed Sample: 10/08/2016 17:42 (EDT)  
Barometric Pressure: 999.2 mb

NOAA/NOS/CO-OPS 8651370 Duck, NC  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)

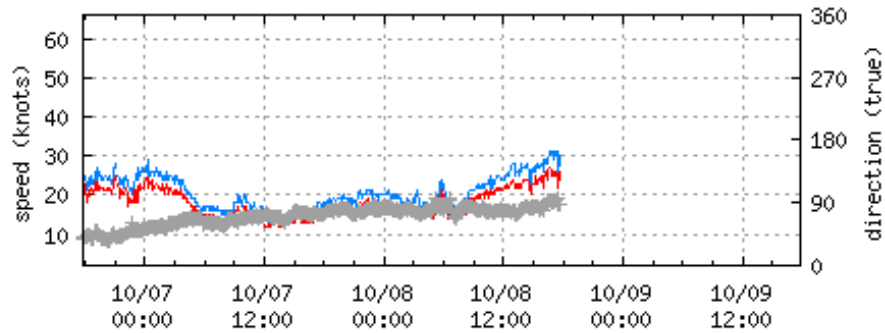


Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW  
Observed: -1.03 ft. Predicted: -2.23 ft. Residual: 1.20 ft.  
Historical Maximum Water Level: Sep 18 2003, 4.13 ft.  
Next High Tide: 10/09/2016 01:29 (EDT), -0.81 ft.

# NOAA/NOS/CO-OPS 8651370 Duck, NC

Wind Speed / Gusts / Direction



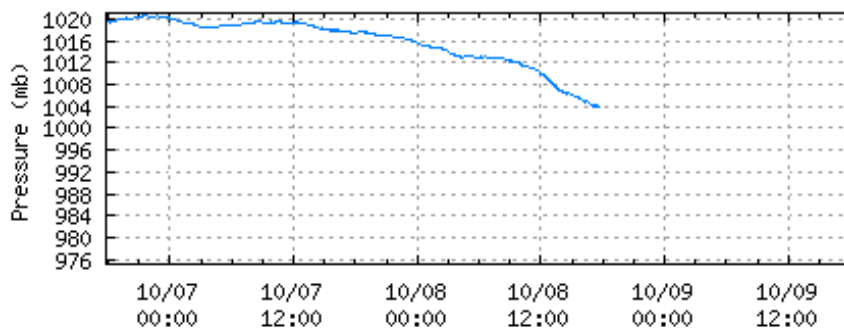
speed — gusts — direction +

Last Observed Sample: 10/08/2016 17:42 (EDT)

Wind Speed: 26 knots Gusts: 30 knots Direction: 88° T

# NOAA/NOS/CO-OPS 8651370 Duck, NC

Barometric Pressure

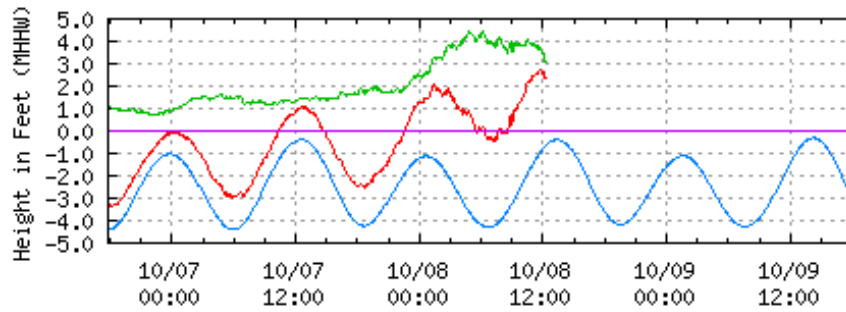


barometric pressure —

Last Observed Sample: 10/08/2016 17:42 (EDT)

Barometric Pressure: 1003.8 mb

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

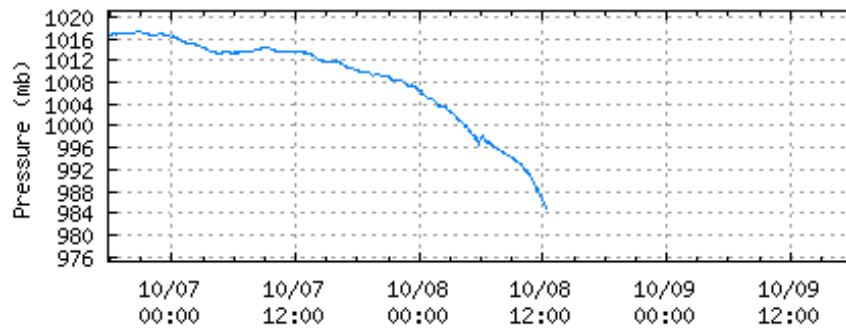
Last Observed Sample: 10/08/2016 12:18 (EDT). Data relative to MHHW

Observed: 2.39 ft. Predicted: -0.66 ft. Residual: 3.05 ft.

Historical Maximum Water Level: Jan 1 1987, 3.65 ft.

Next High Tide: 10/08/2016 13:24 (EDT), -0.39 ft.

NOAA/NOS/CO-OPS 8661070 Springmaid Pier, SC  
Barometric Pressure

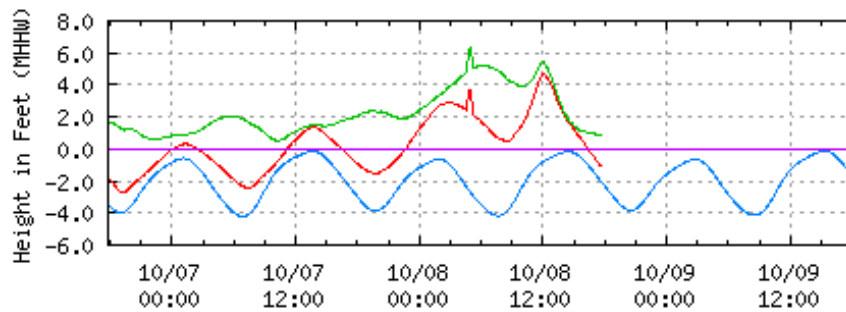


barometric pressure —

Last Observed Sample: 10/08/2016 12:18 (EDT)

Barometric Pressure: 985.0 mb

NOAA/NOS/CO-OPS 8662245 Oyster Landing (N Inlet Estuary), SC  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide ——— (Obs-Pred) ———  
Observed WL ——— MHHW ———

Last Observed Sample: 10/08/2016 17:36 (EDT). Data relative to MHHW

Observed: -1.08 ft. Predicted: -1.99 ft. Residual: 0.91 ft.

Historical Maximum Water Level: Aug 26 2011, 2.40 ft.

Next High Tide: 10/09/2016 02:46 (EDT), -0.65 ft.

NOAA/NOS/CO-OPS 8665530 Charleston, SC

Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW

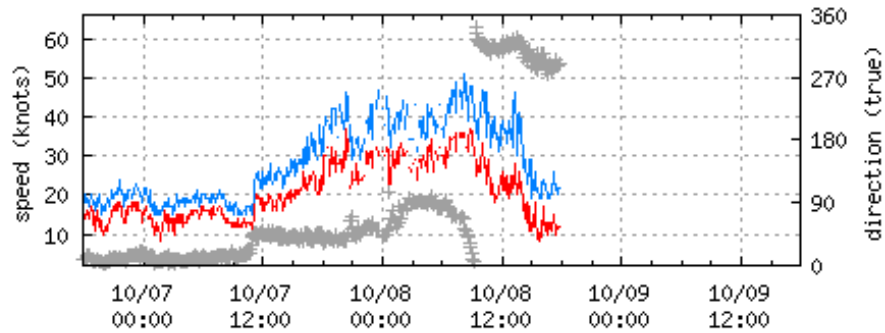
Observed: -2.66 ft. Predicted: -3.04 ft. Residual: 0.38 ft.

Historical Maximum Water Level: Sep 21 1989, 6.76 ft.

Next High Tide: 10/09/2016 01:51 (EDT), -0.87 ft.

# NOAA/NOS/CO-OPS 8665530 Charleston, SC

Wind Speed / Gusts / Direction



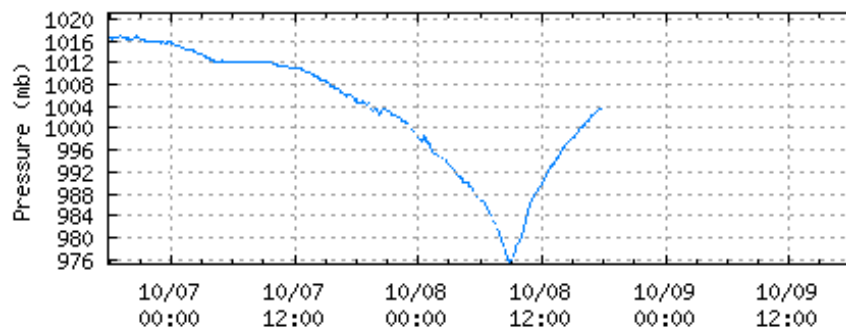
speed — gusts — direction +

Last Observed Sample: 10/08/2016 17:42 (EDT)

Wind Speed: 12 knots Gusts: 22 knots Direction: 289° T

# NOAA/NOS/CO-OPS 8665530 Charleston, SC

Barometric Pressure

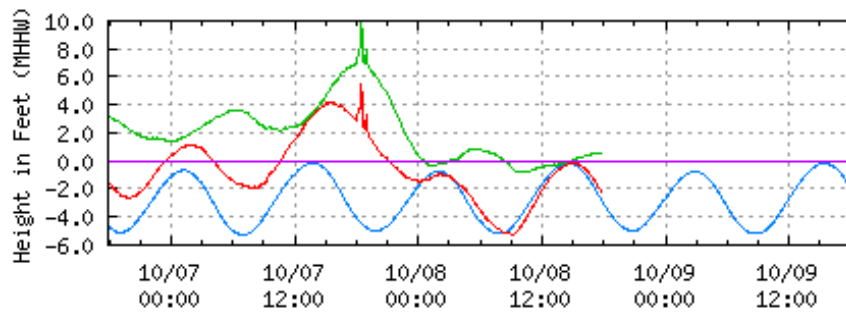


barometric pressure —

Last Observed Sample: 10/08/2016 17:42 (EDT)

Barometric Pressure: 1003.6 mb

NOAA/NOS/CO-OPS 8720030 Fernandina Beach, FL  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

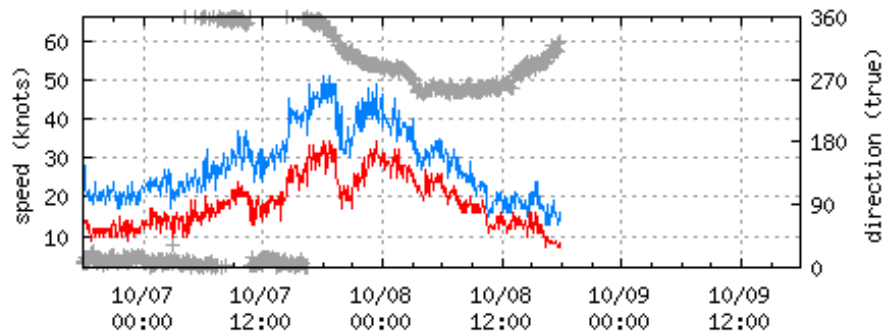
Last Observed Sample: 10/08/2016 17:48 (EDT). Data relative to MHHW

Observed: -2.24 ft. Predicted: -2.82 ft. Residual: 0.58 ft.

Historical Maximum Water Level: Oct 2 1898, 6.94 ft.

Next High Tide: 10/09/2016 02:51 (EDT), -0.76 ft.

NOAA/NOS/CO-OPS 8720030 Fernandina Beach, FL  
Wind Speed / Gusts / Direction



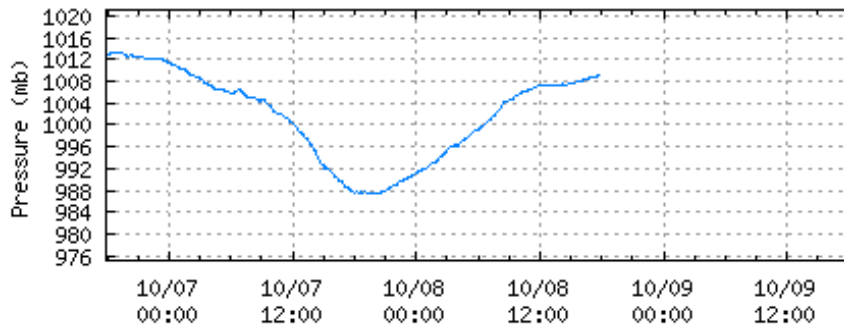
speed — gusts — direction +

Last Observed Sample: 10/08/2016 17:48 (EDT)

Wind Speed: 8 knots Gusts: 16 knots Direction: 324° T



NOAA/NOS/CO-OPS 8720030 Fernandina Beach, FL  
Barometric Pressure

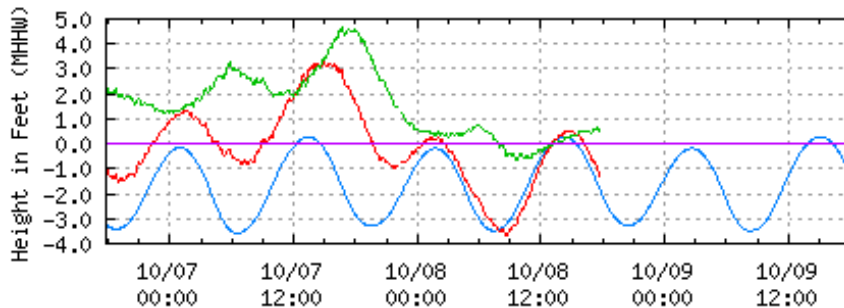


barometric pressure —

Last Observed Sample: 10/08/2016 17:48 (EDT)

Barometric Pressure: 1009.1 mb

NOAA/NOS/CO-OPS 8720218 Mayport (Bar Pilots Dock), FL  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide —  
Observed WL —

(Obs-Pred) —  
MHHW —

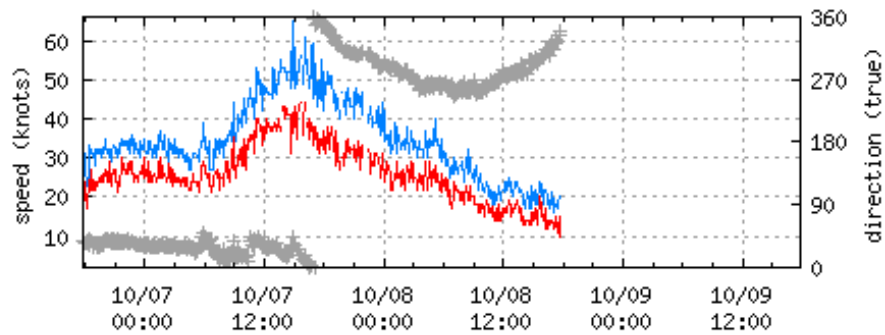
Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW

Observed: -1.34 ft. Predicted: -1.83 ft. Residual: 0.49 ft.

Historical Maximum Water Level: Sep 27 2004, 2.47 ft.

Next High Tide: 10/09/2016 02:39 (EDT), -0.18 ft.

NOAA/NOS/CO-OPS 8720218 Mayport (Bar Pilots Dock), FL  
Wind Speed / Gusts / Direction

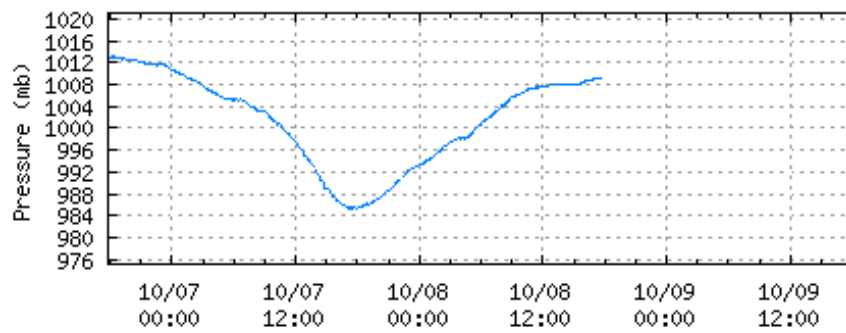


speed — gusts — direction +

Last Observed Sample: 10/08/2016 17:42 (EDT)

Wind Speed: 10 knots Gusts: 20 knots Direction: 339° T

NOAA/NOS/CO-OPS 8720218 Mayport (Bar Pilots Dock), FL  
Barometric Pressure

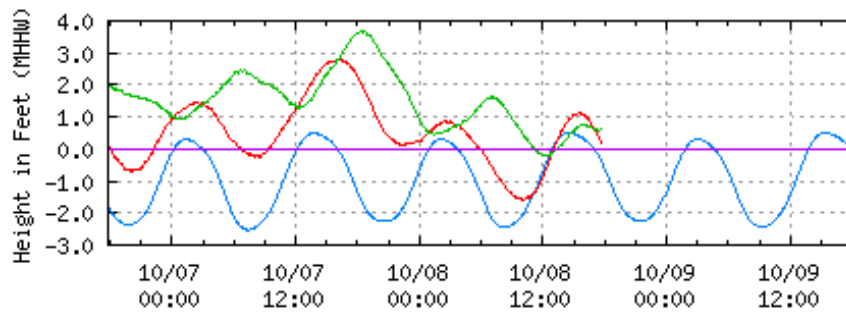


barometric pressure —

Last Observed Sample: 10/08/2016 17:42 (EDT)

Barometric Pressure: 1009.3 mb

NOAA/NOS/CO-OPS 8720219 Dames Point, FL  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide ——— (Obs-Pred) ———  
Observed WL ——— MHHW ———

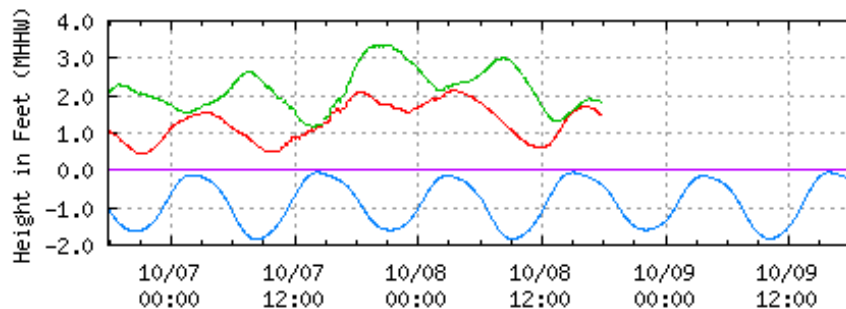
Last Observed Sample: 10/08/2016 17:48 (EDT). Data relative to MHHW

Observed: 0.14 ft. Predicted: -0.48 ft. Residual: 0.62 ft.

Historical Maximum Water Level: Sep 17 2001, 2.40 ft.

Next High Tide: 10/09/2016 03:00 (EDT), 0.31 ft.

NOAA/NOS/CO-OPS 8720226 Southbank Riverwalk, St Johns River, FL  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide ——— (Obs-Pred) ———  
Observed WL ——— MHHW ———

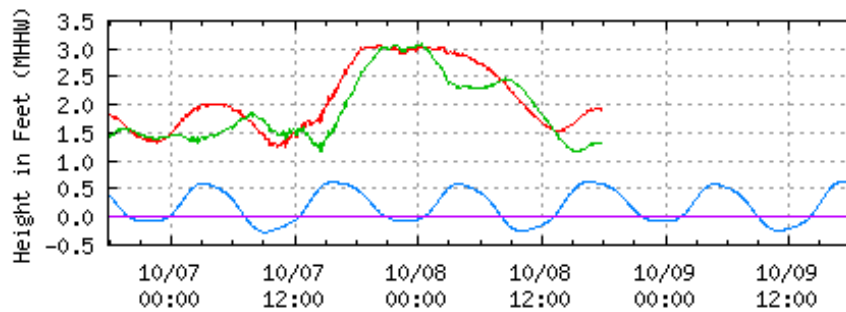
Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW

Observed: 1.48 ft. Predicted: -0.36 ft. Residual: 1.84 ft.

Historical Maximum Water Level: Sep 27 2004, 3.44 ft.

Next High Tide: 10/09/2016 03:40 (EDT), -0.16 ft.

NOAA/NOS/CO-OPS 8720357 I-295 Bridge, St Johns River, FL  
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

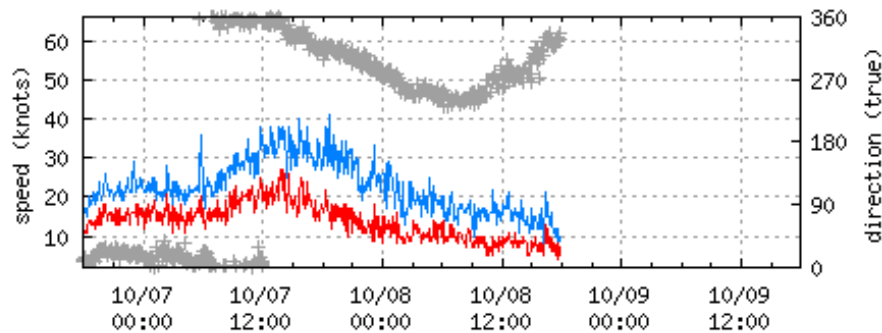
Last Observed Sample: 10/08/2016 17:48 (EDT). Data relative to MHHW

Observed: 1.91 ft. Predicted: 0.58 ft. Residual: 1.33 ft.

Historical Maximum Water Level: Sep 27 2004, 3.46 ft.

Next High Tide: 10/09/2016 04:46 (EDT), 0.58 ft.

NOAA/NOS/CO-OPS 8720357 I-295 Bridge, St Johns River, FL  
Wind Speed / Gusts / Direction

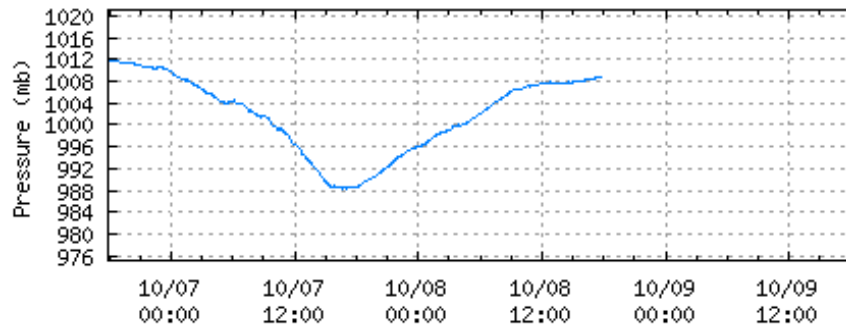


speed — gusts — direction +

Last Observed Sample: 10/08/2016 17:48 (EDT)

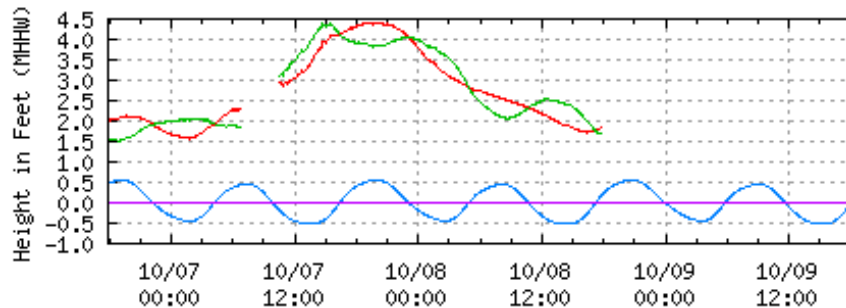
Wind Speed: 7 knots Gusts: 9 knots Direction: 329° T

NOAA/NOS/CO-OPS 8720357 I-295 Bridge, St Johns River, FL  
Barometric Pressure



barometric pressure —  
Last Observed Sample: 10/08/2016 17:48 (EDT)  
Barometric Pressure: 1008.8 mb

NOAA/NOS/CO-OPS 8720625 Racy Point, St Johns River, FL  
Preliminary Water Level, relative to Mean Higher High Water (MHHW)



Predicted Tide — (Obs-Pred) —  
Observed WL — MHHW —

Last Observed Sample: 10/08/2016 17:42 (EDT). Data relative to MHHW

Observed: 1.84 ft. Predicted: 0.16 ft. Residual: 1.68 ft.

Historical Maximum Water Level: n/a

Next High Tide: 10/08/2016 20:48 (EDT), 0.56 ft.

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8658120	Wilmington, NC	10/08/2016 17:42 (EDT)	2.35 ft	-1.29 ft	3.64 ft	3.53 ft
8658163	Wrightsville Beach, NC	10/08/2016 17:42 (EDT)	-0.51 ft	-2.53 ft	2.02 ft	2.63 ft
8656483	Beaufort, NC	10/08/2016 17:42 (EDT)	0.89 ft	-1.78 ft	2.67 ft	2.10 ft
8652587	Oregon Inlet Marina, NC	10/08/2016 17:42 (EDT)	0.08 ft	-0.57 ft	0.65 ft	0.89 ft
8654467	USCG Station Hatteras, NC	10/08/2016 17:42 (EDT)	-0.25 ft	-0.31 ft	0.06 ft	0.89 ft
8651370	Duck, NC	10/08/2016 17:42 (EDT)	-1.03 ft	-2.23 ft	1.20 ft	0.76 ft
8661070	Springmaid Pier, SC	10/08/2016 12:18 (EDT)	2.39 ft	-0.66 ft	3.05 ft	2.75 ft
8662245	Oyster Landing (N Inlet Estuary), SC	10/08/2016 17:36 (EDT)	-1.08 ft	-1.99 ft	0.91 ft	4.70 ft
8665530	Charleston, SC	10/08/2016 17:42 (EDT)	-2.66 ft	-3.04 ft	0.38 ft	3.53 ft
8720030	Fernandina Beach, FL	10/08/2016 17:48 (EDT)	-2.24 ft	-2.82 ft	0.58 ft	5.45 ft
8720218	Mayport (Bar Pilots Dock), FL	10/08/2016 17:42 (EDT)	-1.34 ft	-1.83 ft	0.49 ft	2.29 ft
8720219	Dames Point, FL	10/08/2016 17:48 (EDT)	0.14 ft	-0.48 ft	0.62 ft	2.39 ft
8720226	Southbank Riverwalk, St Johns River, FL	10/08/2016 17:42 (EDT)	1.48 ft	-0.36 ft	1.84 ft	2.13 ft
8720357	I-295 Bridge, St Johns River, FL	10/08/2016 17:48 (EDT)	1.91 ft	0.58 ft	1.33 ft	3.07 ft
8720625	Racy Point, St Johns River, FL	10/08/2016 17:42 (EDT)	1.84 ft	0.16 ft	1.68 ft	4.41 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)  
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